Perspectives on Sustainable Development

After using oral, print and multimedia sources to investigate and categorize current issues surrounding water use, students investigate and define differing perspectives on the political, economic and environmental challenges facing the sustainability of water use. Students also investigate two different perspectives regarding the use of bottled water.

Instructional Support

A number of possible tasks are provided in this suggested activity. It is not intended that you work through all of the tasks, but rather select those tasks and resources that will best meet the learning needs of your students. The focus should be on ensuring that students have the background and support to be successful with the skill that is the focus for assessment (describe multiple perspectives).

Setting the Context for Learning

- Let students know that over the next several classes, they will be investigating the effect of water use on sustainability and prosperity.
- Ask students to work in small groups to identify the main ways that they use water on a daily basis.
- Discuss the meaning of the term "footprint" in terms of the environment. Invite students to collect and analyze data to determine their water footprint by using the online calculator <u>Your Water Footprint</u>.
- Following students' work with the water footprint calculator, discuss as a class why the calculator questions would ask about bottled water.
- Encourage students to consider the effects of a large and/or a small "water footprint" on the sustainability of the resource.
- Let students know that as they work through their inquiry over the next few classes, they will be working on the skills that they need in order to be successful with the <u>Summative Assessment Task - Competing Interests: Water Privatization under the</u> <u>Microscope</u>
- Share the summative assessment task and the <u>assessment task rubric</u> with students. Point out the different parts of the task, and let students know that they will be working on the various parts of the task as the classes proceed. Invite students to begin to consider the various formats that can be used to complete the summative assessment task.
- When introducing the summative assessment task, make a connection between this task and the previous <u>Summative Assessment Task: A Day in Your Life</u>. Note both the similarities and the differences of the assessment focuses in the two tasks.
- The language of the assessment task rubric is clarified through the formative assessment opportunities provided for each suggested activity. The boldfaced descriptive words in the rubric are also clarified in the Summative Assessment Task Rubric Glossary .
- Consider providing exemplars of completed student work to introduce the summative assessment task. Students may benefit from seeing what the end product could look like. Students may also benefit from a discussion about how the exemplars reflect varying levels of quality.

Building Background Understanding

- Assist students in accessing a variety of websites, newspaper or magazine articles, and blogs to find information about local or global current events and issues related to sustainable development and water use:
 - o maps (e.g., Worldmapper Water Use)
- Possible examples of issues may include:
 - irrigation
 - o desertification
 - flooding
 - o climate change
 - pollution
 - o overuse of water
 - economic gain
 - o environmental impact of plastic bottles
 - water shortages
 - water rights
 - water use in the extraction of oil
 - access to clean drinking water
- Assign students to work in groups to gather information on one of the issues. As part
 of their information gathering, they should consider the political, economic and
 environmental challenges related to sustainable development and water use.
- Help students identify various perspectives surrounding the issue and to consider
 why different perspectives exist. Ensure that students understand that in addition to
 identifying the perspectives, they also need to be able to describe the reasoning
 behind the perspective. For example, a student could say:

Enν	vironmentalists	are against	bottled water	because	

- Have students share their summary of the issue and the perspectives surrounding the issue with the class.
- This activity prepares students with background information and a preliminary skills
 focus on multiple perspectives to assist them with the more in-depth look at different
 perspectives on bottled water in the summative assessment task.

Describe Multiple Perspectives

- Provide students with links to two media sources representing different perspectives on the use of bottled water, such as <u>The Story of Bottled Water</u> and <u>The Real Story of Bottled Water</u>.
- Ask students to summarize and describe the differing perspectives presented in the media sources. Suggest that students consider:
 - o what is discussed in positive terms
 - what is discussed in negative terms
 - the emotional impact of the language used in addressing each side of the issue.

To aid in gathering information, students may wish to use an organizer **W**.

- Help students understand how language can be biased to support a perspective. Although this technique is useful to each group in promoting its perspective, students should filter out the biased language as they describe the perspectives.
- There will be an opportunity for students to state and support their position in the latter part of the summative assessment task; however, this first part of the task provides students with an opportunity to gather information about both perspectives on the issue of bottled water.

Possible Extension Activity

- Students may wish to investigate the claims in the videos by conducting a survey of attitudes about water and a simple blind taste test in their class or school with unmarked samples of tap and bottled water. They could then summarize their results.
- Students can compare their results to a larger sample by examining a larger taste test (e.g., <u>Bottled Water: Who Needs It?</u>)
- Students can discuss their perceptions of the reasons for people's attitudes about taste, texture and the health impacts of bottled water compared to tap water.

Formative Assessment

Throughout this suggested activity, you will support students in achieving the following skill that is the focus for assessment:

• <u>describe multiple perspectives</u>

The following formative assessment opportunity is provided to help students unpack and develop the focus skill for assessment. Feedback prompts are also provided to help students enhance their demonstration of the focus skill for this activity. Formative assessment support is not intended to generate a grade or score.

Formative Assessment: Assessment for Learning Opportunity

Describe Multiple Perspectives

Involve students in a *self-reflection* to get feedback on the comprehensiveness of their description of multiple perspectives. Use the feedback prompts below to provide structure in guiding students through this formative assessment opportunity.

Feedback Prompts:

- Have I described the key points of each perspective?
- Have I provided information about the reasoning behind each perspective?
- Have I used language that is free from bias?

These feedback prompts have been incorporated into the <u>Describe Multiple Perspectives:</u>

<u>Student Self-reflection Tool</u> , which can be copied or adapted for student use. Samples of tools created for a similar skill within a different formative assessment context may be found in the <u>Social Studies 10-4 Formative Assessment Summary</u>.

Linking to the Summative Assessment Task

- As students describe multiple perspectives through the suggested activity
 Perspectives on Sustainable Development, they will have completed the first portion
 of the <u>Summative Assessment Task Competing Interests: Water Privatization</u>
 under the <u>Microscope</u>.
- Students should consult the summative assessment task and the <u>assessment task</u> rubric w to ensure that they have provided the information required.
- Encourage students to use the feedback received during the formative assessment opportunity to make enhancements to their work in progress.
- If necessary, continue to use the feedback prompts from the formative assessment opportunity to coach students toward completion of a quality product.
- If students have not yet selected a format for their final product, encourage them to do so now.

Suggested Supporting Resources

Textbook References

Student Basic Resource—Oxford University Press, Living in a Globalizing World:

- Pages 232–233 Environmental Impacts of Globalization
- Page 247 Chapter Summary and Reflection: Apply and Extend Ideas, Question 4
- Pages 322–325 Water: An Essential Natural Resource

Teaching Resource—Oxford University Press, Living in a Globalizing World:

- Pages 322–324 Activity 4: UNICEF Website Journey and The Need for Safe Water
- RM 0.1 Asking Questions: The 5 Ws and H
- RM 0.2 Venn Diagram
- RM 0.3 Analyzing & Discussing Issues
- RM 0.11 Critical Assessment: Plus-and-Minus Chart
- RM 14.2 My Ecological Footprint
- RM 19.4 UNICEF Website Journey—The Need for Safe Water
- AM 1 Demonstrating Understanding Rubric
- AM 2 Generating & Organizing Ideas Rubric
- AM 3 Considering Multiple Perspectives Rating Scale
- AM 4 Considering Multiple Perspectives & Viewpoints Rubric
- AM 15 Discussing Issues Rating Scale
- AM 22 Political Cartoon Rubric

Teaching Resource—Oxford University Press, Understandings of Ideologies:

• RM 5.2 Identifying Points of View and Perspectives

Teaching Resource—Duval House Publishing, *Aboriginal Studies 10: Aboriginal Perspectives*:

- Pages 433–434 Talking Circles Protocol
- Pages 479–482 Rubrics

 For background information on Aboriginal stewardship and environmental responsibility, see Aboriginal Studies 10: Aboriginal Perspectives student resource.

Web Resources

Web Links for Online Sources:

- Alberta Environment and Sustainable Resource Development website—section: Water for Life
- Worldmapper website—section: Water Use
- The Conference Board of Canada website—section: Environment: Water Withdrawals
- Grace Communications Foundation website—Water Footprint Calculator section: How Big Is Your Water Footprint?
- National Geographic website—Environment section: What Is Your Water Footprint?
- World Health Organization—Fact File, Water Scarcity: Ten Facts about Water Scarcity
- PBWorks website—section: Creating Sustainable Communities
- NationMaster.com website—section: Food Statistics, Bottled Water Consumption (Most Recent) by Country
- Global Issues website—section: Water and Development
- American Beverage Association website
- Water Matters website—article: Our Priorities for Alberta's Water Conversations
- The Vancouver Sun—article: British Columbians Giving Bottled Water the Boot
- CartoonStock website—political cartoons: Bottled Water
- The Cartoonist Group website—political cartoons: The Water Comics and Cartoons

Knowledge and Employability Studio (Social Studies):

Self-assessment Checklist: 10-4.3 Globalization and the Economy



Videos:

- YouTube.com website:
 - Bottled Water Who Needs It?
 - The Real Story of Bottled Water
- The Story of Stuff Project website: The Story of Bottled Water
- PBS website: POV Borders, Environment: Bottle This!

Distributed Learning/Tools4Teachers Resources:

LearnAlberta.ca: Social Studies 10-2 Module 5: Stewardship and Sustainable Prosperity

Critical Challenges:

- LearnAlberta.ca:
 - Creating Sustainable Prosperity
 - o Globalization and Free Market Conditions
 - o <u>Transnational Corporations and the Interests of the Country</u>
 - o The Tools of Economic Globalization

Stories and Other Media (e.g., films, stories/literature, nonfiction, graphic novels)

• Water for Sale: How Business and the Market Can Resolve the World's Water Crisis, by Fredrik Segerfeldt (nonfiction [for teachers], Cato Institute)